

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A component mounting device, comprising:
 - a component collar;
 - a vertical rack gear on the component collar;
 - a horizontal rack gear on the component collar;
 - a component mounting frame ~~configured~~ designed to receive the component collar;
 - [[and]]
 - a clocked gear assembly coupled to the component mounting frame[[,]];
 - a vertical clocked gear in the clocked gear assembly; and
 - a horizontal clocked gear in the clocked gear assembly, wherein ~~the clocked gear assembly configured~~ the vertical clocked gear is designed to engage the vertical rack gear and the horizontal clocked gear is designed to engage the horizontal rack gear to enable movement of the component collar in at least two substantially perpendicular directions to actively enable the component.

2. (Currently Amended) The component mounting device of claim 1, further comprising:
 - ~~a vertical rack gear on the component collar;~~
 - ~~a horizontal rack gear on the component collar;~~
 - ~~a vertical clocked gear in the clocked gear assembly;~~
 - ~~a horizontal clocked gear in the clocked gear assembly; and~~
 - a lever for controlling the vertical clocked gear and the horizontal clocked gear,

wherein the vertical rack gear meshes with the vertical clocked gear to enable movement of the component collar in a first direction and the horizontal rack gear meshes with the horizontal clocked gear to enable movement of the component collar in a second direction, the first direction and the second direction being substantially perpendicular.

3. (Previously Presented) The component mounting device of claim 2, wherein movement in the first direction and in the second direction is accomplished by movement of the lever along an arc.

4. (Original) The component mounting device of claim 3, wherein the lever includes a first pin to engage the vertical clocked gear, the vertical clocked gear having a first slot for receiving the first pin, and the lever includes a second pin to engage the horizontal clocked gear, the horizontal clocked gear having a second slot for receiving the second pin.

5. (Original) The component mounting device of claim 4, wherein movement of the lever through a first segment of the arc causes the first pin to engage the first slot to move the vertical clocked gear and movement of the lever through a second segment of the arc causes the second pin to engage the second slot to move the horizontal clocked gear.

6. (Original) The component mounting device of claim 5, wherein the first pin disengages from the first slot and the second pin engages the second slot at a cross-over point.

7. (Original) The component mounting device of claim 5, wherein the arc is defined by approximately 90 degrees, the first segment being defined by approximately 45 degrees and the second segment being defined by approximately 45 degrees.

8. (Original) The component mounting device of claim 1, wherein movement of the component in a first direction is configured to enable insertion of the component device into an array of component devices and movement of the component in a second direction is configured to enable connection of the component to a board connector.

9. (Currently Amended) A component mounting device, comprising:

a component collar for holding a component, the component collar having a first rack gear and a second rack gear;

a component mounting frame ~~configured~~ designed to receive the component collar;
and

a clocked gear assembly coupled to the component mounting frame, the clocked gear assembly having a first clocked gear and a second clocked gear, the first clocked gear designed to effect ~~the clocked gear assembly configured to enable~~ movement of the component collar in a first direction upon initial engagement with the first rack gear of the component mounting frame, and the second clocked gear designed to effect movement of the component collar in a second direction upon release of the first clocked gear ~~clocked gear assembly~~ by first rack gear and engagement of the second rack gear to the second clocked gear ~~clocked gear assembly~~.

10. (Currently Amended) The component mounting device of claim 9, wherein the clocked gear assembly is further configured to ~~enable~~ effect movement of the component

collar in the first direction upon release of the ~~elected gear assembly~~ second clocked gear by the second rack gear of the component mounting frame, and engagement of the first rack gear to the ~~elected gear assembly~~ first clocked gear.

11. (Original) The component mounting device of claim 9, wherein the component mounting frame comprises a track for engaging the component collar, the track guiding the component collar during movement of the component collar in the first direction and guiding the component collar during movement of the component collar in the second direction.

12. (Original) The component mounting device of claim 9, wherein movement of the component collar in the second direction is configured to enable connection of the component to a board connector.

13. (Original) The component mounting device of claim 10, wherein movement of the component collar in the first direction is configured to enable insertion of the component into an array of components and is further configured to enable extraction of the component from an array of components.

14. (Currently Amended) A computer component mounting device, comprising:
a computer component disposed in a component collar, the component collar having a vertical rack gear and a horizontal rack gear;
a component mounting frame ~~configured~~ designed to receive the component collar;
and

a clocked gear assembly having a vertical clocked gear and a horizontal clocked gear, the vertical rack gear meshed with the vertical clocked gear to effect ~~configured to enable~~ movement of the computer component in ~~each of~~ a first direction and the horizontal rack gear meshes with the horizontal clocked gear to effect movement of the component in a second direction, wherein the computer component mounting device provides for positioning the computer component in the first direction and ~~for positioning the computer component~~ in the second direction, and the second direction is substantially perpendicular to the first direction.

15. (Currently Amended) The computer component mounting device of claim 14, wherein the clocked gear assembly includes:

~~a vertical clocked gear;~~

~~a horizontal clocked gear; and~~

a lever for controlling the vertical clocked gear and the horizontal clocked gear,

wherein the vertical clocked gear and the horizontal clocked gear are independently actuated by movement of the lever, the lever having a first pin configured to engage a first slot on the vertical clocked gear and the lever further having a second pin configured to engage a second slot on the horizontal clocked gear.

16. (Original) The computer component mounting device of claim 15, wherein positioning the computer component in the first direction and in the second direction is accomplished by movement of the lever in through a single arc.

17. (Original) The computer component mounting device of claim 15, wherein movement of the lever through a first arc segment causes the first pin to engage the first

slot to move the vertical clocked gear, and movement of the lever through a second arc segment causes the second pin to engage the second slot to move the horizontal clocked gear.

18. (Currently Amended) A computer device carrier system, comprising:

a carrier blade capable of receiving a plurality of computer devices and further configured to arrange the plurality of computer devices in at least one array of computer devices;

a computer device collar coupled to a computer device, the computer device collar having a vertical rack gear and a horizontal rack gear; and

a computer device frame attached to the carrier blade, the computer device frame providing positioning and support for ~~[[a]]~~ the computer device, and including a clocked gear assembly having a vertical clocked gear and a horizontal clocked gear capable of positioning the computer device in ~~each of~~ a first direction upon engagement of the vertical clocked gear with the vertical rack gear and positioning the computer device in a second direction upon release of the engagement of the vertical clocked gear with the vertical rack gear and engagement of the horizontal clocked gear with the horizontal rack gear, wherein the second direction is substantially perpendicular to the first direction; ~~and~~

~~a computer device collar coupled to the computer device, the computer device collar configured to be received by the computer device frame to position and support the computer device.~~

19. (Currently Amended) The computer device carrier system of claim 18, wherein the clocked gear assembly includes:

~~a vertical clocked gear;~~

~~a horizontal clocked gear; and~~

a lever for controlling the vertical clocked gear and the horizontal clocked gear,

wherein the vertical clocked gear and the horizontal clocked gear are independently actuated by movement of the lever, the lever having a first pin configured to engage a first slot on the vertical clocked gear, and a second pin configured to engage a second slot on the horizontal clocked gear, and movement of the lever through a first arc causes the first pin to engage the first slot to move the vertical clocked gear and movement of the lever through a second arc causes the second pin to engage the second slot to move the horizontal clocked gear, and a cross-over point being defined when the first pin disengages from the first slot and the second pin engages the second slot.

20. (Currently Amended) In an integrated computer and server component rack, a storage array carrier system, comprising:

a carrier blade capable of receiving a plurality of storage devices and arranging the plurality of storage devices in a plurality of linear arrays;

a storage device frame attached to the carrier blade to position and to secure a storage device, the storage device frame including a clocked gear assembly having a vertical clocked gear and a horizontal clocked gear ~~configured to enable movement of the storage device in at least two substantially perpendicular directions;~~ and

a device collar coupled to the storage device, the device collar ~~capable of being~~ designed to be received in a track of the storage device frame, the device collar having a vertical rack gear and a horizontal rack gear, wherein the vertical rack gear meshes with the vertical clocked gear to move the storage device in a first direction and the horizontal rack gear meshes with the horizontal clocked gear to move the storage in a second direction substantially perpendicular to the first direction ~~configured to mesh with the clocked gear~~

assembly to position the storage device and to connect the storage device to, and disconnect the storage device from, a power and data connection.

21. (Currently Amended) In an integrated computer and server component rack, the storage array carrier system of claim 20, wherein the clocked gear assembly includes:

~~a vertical clocked gear;~~

~~a horizontal clocked gear; and~~

a lever for controlling the vertical clocked gear and the horizontal clocked gear,

wherein the vertical clocked gear and the horizontal clocked gear are independently actuated by movement of the lever to mesh with each of a vertical rack gear of the device collar and a horizontal rack gear of the device collar for inserting the storage device into and removing the storage device from a location in one of the plurality of linear arrays of storage devices without one of connecting and disconnecting another storage device.

22.-28. (Cancelled)